

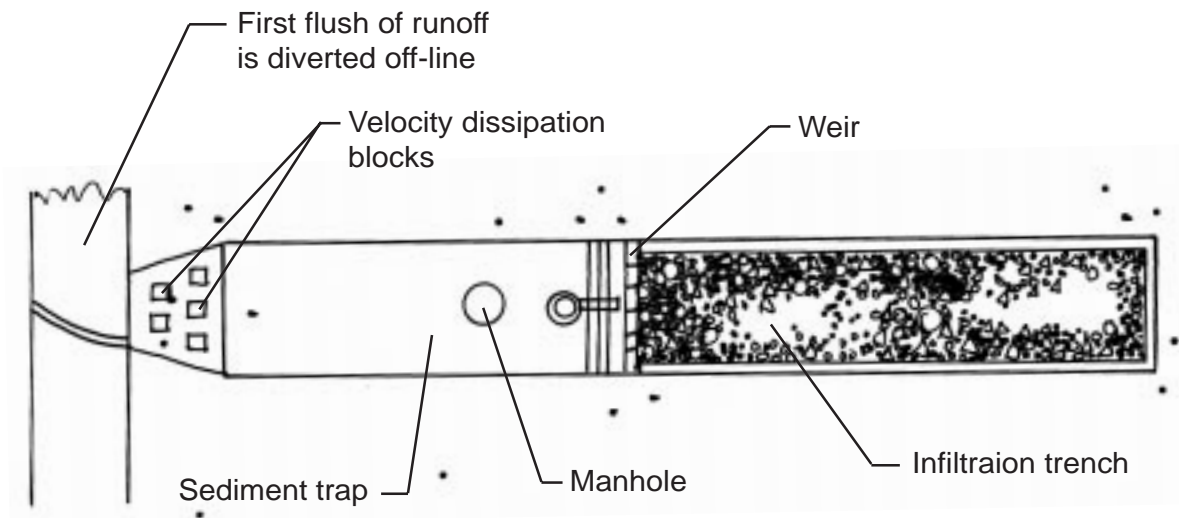
PRIMARY USE: For the treatment of concentrated stormwater runoff.
ADDITIONAL USES:

OFF-LINE INFILTRATION SYSTEM DESIGN

What is it? The design of these systems varies, however, the first flush of runoff is directed off-line to velocity dissipation blocks as an initial treatment of water before it enters a sediment trap. After sediment drops out, the stormwater runoff passes through a weir for dispersion into the infiltration trench and treatment through a sand filter.

Purpose

Infiltration trenches can potentially reproduce pre-development hydrologic conditions for given sites.



**Off-line Infiltration System Design
Plan View**

Limitations

As with all trenches, soils must be permeable to allow for exfiltration.

Materials

Sediment trap, perforated pipe, metal weir, gravel, filter fabric, and sand.

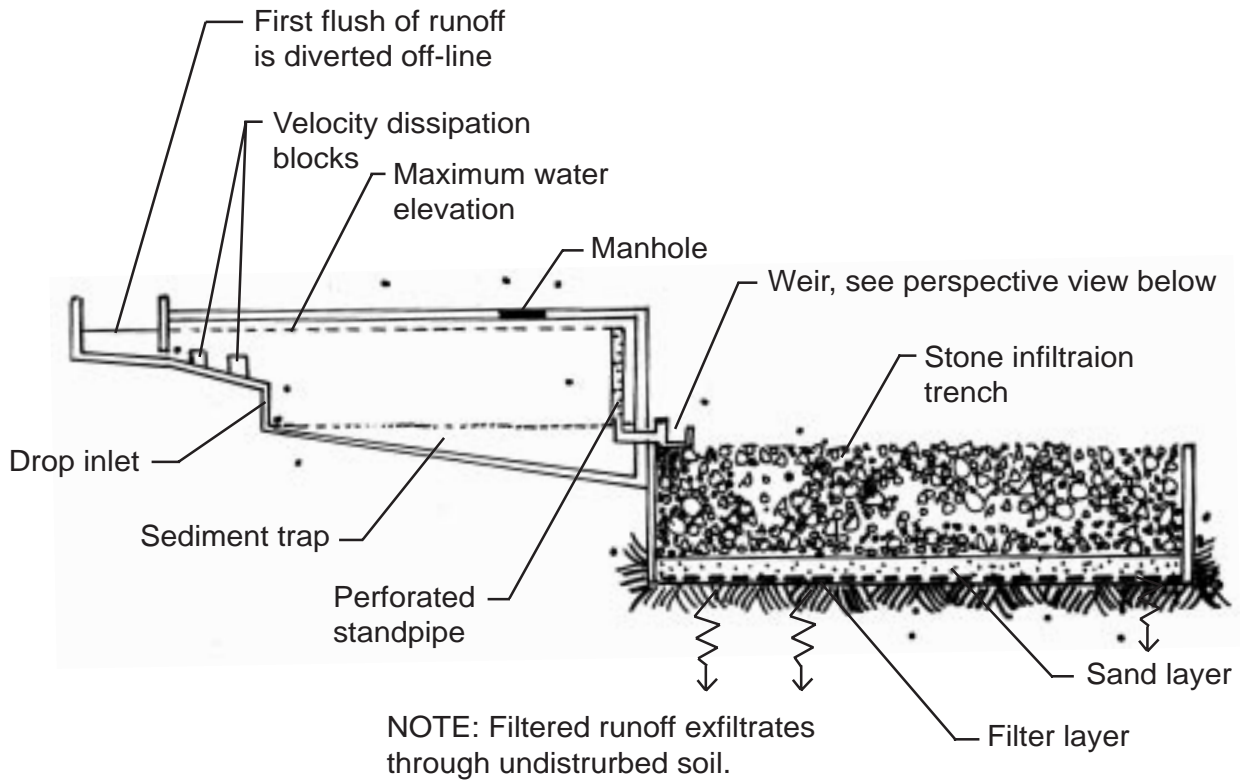
Installation

Trenches must be kept free of sediment build-up. Therefore, careful construction to avoid soil in the filtration media is critically important, as is the installation of the grass filter strip.

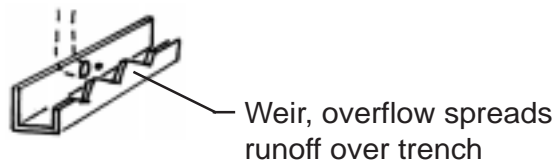
Source: Controlling Urban Runoff, Metropolitan Washington.

OFF-LINE INFILTRATION SYSTEM DESIGN

Additional Drawings:



**Off-line Infiltration System Design
Section View**



**Weir,
Overflow Spreader for Runoff Over Trench
Perspective View**